



UNIVERSITI PUTRA MALAYSIA

***RELATIONSHIP BETWEEN CHILD TEMPERAMENT AND MATERNAL
PARENTING BEHAVIOUR AMONGST PRESCHOOL CHILDREN IN
SERDANG, SELANGOR, MALAYSIA***

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SERDANG, SELANGOR, MALAYSIA**

By

ROHINI INDRAN

**Thesis Submitted to the School of Graduate Studies, Universiti
Putra Malaysia, in Fulfilment of the Requirements for the
Degree of Master of Science**

November 2016

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DEDICATION

This effort is dedicated to all children with emotional and behavioural issues who are struggling to be understood, hoping for more resolutions on this endeavour in future.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirements for the Degree of Master of Science

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ROHINI INDRAN

November 2016

Chairman : Mariani Mansor, PhD
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The main objective of this study was to examine child emotional and behaviour problems of externalising and internalising behaviours and its relationship with child temperament and maternal parenting behaviours amongst preschool children in Serdang, Selangor. Teachers of 387 children aged 4 to 6 years old from identified preschools filled the Caregiver Teacher Report Form (CTRF) to screen children with emotional and behaviour problems. Subsequently, a further questionnaire was distributed to mothers of the children to examine child temperament via the Child Behaviour Questionnaire (CBQ) and maternal parenting behaviours via the Parental Acceptance-Rejection Questionnaire (PARQ). The results found that child temperament of negative affectivity predicted both externalising and internalising behaviour problems. Moreover, the results analysed also concluded that lack of maternal warmth and acceptance and a prevalence of maternal rejection most significantly contributed to the development of externalising and internalising behaviour problems in the respondents. Furthermore, the study found that the relationship between effortful control and surgency and externalising behaviour problems were fully mediated by maternal parenting behaviour while negative affectivity and externalising and internalising behaviours were partially mediated by maternal parenting behaviours. Thus, negative maternal parenting behaviour has been identified as the strongest predictor of behaviour problems in preschool children validating the importance of mother-child relationships via proximal processes. This stresses the importance of intervention programs to strengthen mother-child relationships while screening and early warning mechanisms should be implemented to prevent the issue from being overlooked. Additionally, based on the National Child Protection policy, it is recommended to increase awareness

and efforts to protect a child, encourage safe and healthy environments for children and increase support services for positive child development.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Ijazah Master Sains

**HUBUNGAN ANTARA TEMPERAMEN KANAK-KANAK DAN TINGKAH
LAKU KEIBUBAPAAN IBU DALAM KALANGAN KANAK-KANAK
PRASEKOLAH DI SERDANG, SELANGOR, MALAYSIA**

Oleh

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Objektif utama kajian ini adalah untuk mengkaji masalah emosi dan tingkah laku kanak-kanak iaitu masalah tingkah laku luaran dan dalaman dan hubungannya dengan temperamen kanak-kanak dan tingkah laku keibubapaan ibu dalam kalangan kanak-kanak prasekolah di Serdang, Selangor. Guru-guru bagi seramai 387 kanak-kanak yang berusia 4 hingga 6 tahun dari prasekolah yang dikenalpasti telah mengisi *Caregiver Teacher Report Form* (CTRF) untuk mengenalpasti kanak-kanak yang mempunyai masalah emosi dan tingkah laku. Berikutan itu, satu soal selidik lagi telah diagihkan kepada ibu kanak-kanak untuk mengkaji temperamen kanak-kanak melalui *Child Behaviour Questionnaire* (CBQ) dan tingkah laku keibubapaan ibu melalui *Parental Acceptance-Rejection Questionnaire* (PARQ). Hasil kajian mendapati bahawa kanak-kanak yang dikenalpasti menunjukkan temperamen *negative affectivity* meramalkan kedua-dua masalah tingkah laku luaran dan dalaman. Selain itu, analisis kajian juga menyimpulkan bahawa kekurangan kemesraan dan penolakan ibu paling ketara menyumbang kepada kewujudan masalah tingkah laku luaran dan dalaman responden. Kajian ini juga mendapati bahawa keibubapaan ibu menjadi pengantara sepenuhnya di antara temperamen *effortful control* dan *surgency* dan masalah tingkah laku luaran manakala keibubapaan ibu menjadi pengantara sebahagiannya di antara temperamen *negative affectivity* dan masalah tingkah laku luaran dan dalaman. Oleh itu, tingkah laku keibubapaan ibu yang negatif telah dikenalpasti sebagai peramal yang paling kuat dalam kewujudan masalah tingkah laku kanak-kanak prasekolah yang mengesahkan kepentingan hubungan ibu-anak melalui *proximal processes*. Ini menekankan kepentingan program intervensi untuk mengukuhkan hubungan ibu-anak manakala saringan dan mekanisme amaran awal perlu dilaksanakan untuk mengelakkan isu

tersebut dari terlepas pandang. Selain itu, berdasarkan dasar Perlindungan Kanak-Kanak Kebangsaan, ia adalah disyorkan untuk meningkatkan kesedaran dan usaha untuk melindungi kanak-kanak, menggalakkan persekitaran yang sihat dan selamat dan meningkatkan perkhidmatan sokongan untuk perkembangan kanak-kanak yang positif.



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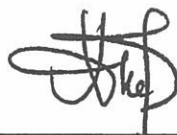
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LIST OF ABBREVIATIONS

APA	American Psychological Association
ASEBA	Achenbach System of Empirically Based Assessment
CBCL	Child Behaviour Checklist
CBQ	Child Behaviour Questionnaire
CDC	Centres for Disease Control and Prevention
CTRF	Caregiver Teacher Report Form
FACE	Family, Adolescent and Child Research Centre of Excellence UPM
KHI	Keluarga Harmoni & Indah Preschool
KINDERBEE	Kembangsari Preschool
COOPERATIVE	Cahaya Mata Koperasi UPM Berhad Preschool
NHMS	National Health and Morbidity Survey
PARQ	Parental Acceptance-Rejection Questionnaire
UNICEF	United Nations Children's Fund
UPM	Universiti Putra Malaysia
WHO	World Health Organisation

CHAPTER 1

INTRODUCTION

This chapter highlights the background of externalising and internalising child behaviour problems from an international and local context. This is then followed by the problem statement of the study leading to the research questions, research objectives, hypotheses and definition of terminologies. Next, the chapter will outline the identified conceptual and theoretical frameworks of the study. Lastly, the significance and limitations of the research are highlighted.

1.1 Research Background

An estimated 10-15% of preschoolers have mild to moderate externalising and internalising behaviour problems (Campbell, 1995), which are common and prevalent amongst children of various backgrounds. The World Health Organisation (WHO) (2005) reported that the worldwide prevalence of mental health problems in children is approximately 20%. This group of society is extremely vulnerable and highly at risk of behavioural and emotional problems with the report of the Centres for Disease Control and Prevention (CDC) showing that children commonly had Attention Deficit Hyperactivity Disorder (ADHD) (6.8%), behavioural and conduct problems (3.5%), anxiety (3.0%), depression (2.1%), autism spectrum disorders (1.1%) and Tourette syndrome (0.2%) (CDC, 2013).

WHO with the United Nations Children's Fund (UNICEF), also described that up to one in five of the world's children are suffering from mental and behavioural problems due to rapid social and economic change and poverty, warning that this issue could lead to serious public health problems in future unless steps are taken to address the issue (BBC News, 2002). The organisations have also highlighted a large increase in depression amongst children, stating that the fourth leading cause of disease and disability are depressive disorders, which, by 2020 are expected to rise to second place. The American Psychological Association (APA) in a study reported that from 1991 to 1995, there has been a drastic rise in the number of preschool children receiving stimulants, antidepressants and other psychiatric medications, raising concerns about the alarming rise in children diagnosed and being treated for disruptive disorders (APA, 2000). The study also stressed how this scenario sparked a growing debate and concern amongst parents, teachers, and practitioners in the field on the rising issue of child behavioural problems amongst preschool children.

Child behaviour problems can be broken down into two broad dimensions of dysfunctional behaviour, i.e. externalising problems which refer to under controlled, acting-out behaviours, such as conduct difficulties, hyperactivity and impulsivity (Achenbach & Rescorla, 2004), and internalising problems i.e. issues involving the experiences of distress, which can be summarised as anxiety, depression, somatic complaints and withdrawn behaviours (Bongers, 2003). According to Richard E. Tremblay (2000) of the University of Montreal, Canada, under the externalising umbrella, aggression is disruptive, obvious and prevalent in a great number of children with an estimate that by the age of 17 months, 70% of children take toys away from other children, 46% push others to obtain what they want and 21–27% engage in one or more of the following with peers – biting, kicking, fighting or physically attacking. In the internalising domain, up to 10% of children are diagnosed with anxiety which is the most prevalent among preschool children while the less diagnosed preschool problem of depression prevalence is up to 2% (Egger & Angold, 2006).

Paediatrics Consultant 360 (2011) described that the identification of such emotional and behavioural problems in early childhood is crucial to decrease the negative impact of these issues on academic and social functioning that could persist in youth and adulthood. The externalising problems of aggressive and noncompliant behaviours frequently surface during the preschool period, which are believed to be managed via coercive parent-child relationships (Gartstein, Putnam, & Rothbart, 2012), while internalising behaviours are often seen in later childhood, nonetheless, early manifestations of internalising symptoms can be observed in preschool periods (Achenbach & Rescorla, 2004). Children always portray concerning behaviours and researchers are now focusing on the significance of behavioural problems in those younger than six years old as they are aware that these behaviours are potential indicators of long-term problems, as this vulnerable stage indicates the rapid social, emotional, cognitive, and linguistic development from toddlerhood to preschool years (Campbell, 1995). According to Campbell (1995), this phase is when a child transitions from dependency of infancy to growing autonomy and social and cognitive competence. Thus, it is pertinent to understand the fundamental development of a child as the extent of development is subjective to individual differences that determine positive development or negative outcomes. Behavioural problems which emerge during the childhood period predict various issues in later adulthood, amongst which include delinquency, criminal behaviour, alcoholism, drug abuse, poor work, marital outcomes and a range of psychiatric disorders (Kazdin, Siegel, & Bass, 1992).

Malaysia is growing rapidly with major developments and urbanisation to reach the country's vision 2020 in approximately five years. With this fast development comes a growing urban population, which causes stressful social environments, and, consequently, an exponential increase in cases of anxiety, depression, alcohol and drug abuse, and suicide (The Star, 2011). The National Health and

Morbidity Survey Malaysia (NHMS) (2006) reported that a distressing 20% of children have mental health issues with development disabilities and emotional and behavioural problems. The rising cases of children suffering from mental health problems in Malaysia has triggered alarm bells amongst health professionals and activists with experts stating that amongst the several possible reasons for the worsening psychiatric morbidity amongst children could include the changing family environment with urbanisation creating more nuclear families and less social support from extended families (NST, 2013). Also in the same report was a statement by Malaysia's Mental Health Promotion Advisory Council on how the rising trend of the mental health of children as troubling, as such children would face disruption in their ability to function in the home, school and community environments. The council also stressed the importance of such situations being identified and handled in the early stages before these children become victims of badly managed mental health problems in later years.

1.2 Problem Statement

In Malaysia, the Ministry of Health's NHMS (2006) carried out between 1996 and 2006, found an alarming and worrisome increase from 13 to 20.3% in psychiatric morbidity amongst children. This is an estimated 5% increase in comparison to the previous report dating 10 years earlier. Childline Malaysia reported emotional neglect and depression as appearing to be the biggest problems amongst Malaysian children with 40% of children – from as young as four years old – calling the helpline with symptoms of psychosocial and mental health problems (NST, 2011).

Also of concern were the statistics reported in 2012 from the Women, Family and Community Development Ministry of Malaysia, revealing that approximately 3,900 child abuse cases were reported, with such situations causing depression, stress and the development of later mental health problems amongst children who undergo these experiences (NST, 2013). Gomez & Suhaimi (2013) from their study to ascertain the rates of emotional and behavioural problems of Malaysian children, found about 5% of children identified as abnormal levels of emotional and behaviour problems while 10% rated at borderline levels. This gave an implication that these results were higher than reported samples from Western countries (Goodman, 1997), but are comparable to Eastern counterparts (Du, Kou & Coghill, 2008), highlighting that non-Western parenting place higher demands of their children (Weiszetal, 1987).

Consequently, educators and parents are now placing more attention and emphasis on mental health as people are facing more problems due to rapid development (Woo & Teoh, 2007). This is exacerbated by parents stressing on academic achievements and various skills of their children that are perhaps based on a cultural perspective that their children are to be relied on to bring

glory to the family, which causes tension and burden to the children, thus leading them to suffer from emotional and behavioural problems (Teoh & Rose, 2001).

Malaysian Mental Health Association has illustrated that depression is currently the world's number two disability and is expected to rise to number one by 2020 (The Star, 2016). The interim NHMS 2015 conducted by the Ministry of Health found 12.1% of children, which is one in five children, having mental health issues which include depression, anxiety, conduct disorder, attention deficit disorder and hyperactivity. Additionally the article quoted Befrienders Kuala Lumpur stressing that the numbers have drastically risen in youngsters who call the organisation for assistance. The organisation has seen an increase in children reaching out for help, now via emails versus the traditional phone calls, making up 21% of emails received in 2015. The emails, according to them, were predominantly from urban children with a large percentage speaking about mental health issues, believing that they were depressed and planning to resort to self-harm.

A report by Childline Malaysia stated that statistics worldwide of child help lines indicate that mental health issues are the main concern of children who reach out for help, with the Malaysian scenario being no different (NST, 2016). They stated that loneliness, self-harm and most importantly depression are issues mostly discussed as there are higher expectations of children today and those who feel they under-perform or can't fit in have self-esteem issue which can lead to mental health problems if not addressed. Also, a report by Voice of Children Malaysia echoed that scenario particularly in urban areas where children are bombarded with the need to excel and impress parents, teachers and peers and if they do not succeed would result in low self esteem and feelings of worthlessness – making children crack under pressure. Children want to live up to images of success and prosperity portrayed and if they are not able to achieve the ideas, there is a great possibility of them emotionally and psychologically spiralling downhill, she said. These issues need to be addressed as early as from preschool, where children need to be encouraged to interact, talk and negotiate problems, to prevent it from escalating at the primary school levels (NST, 2016).

With the distressing statistics showing the prevalence of child behaviour problems in Malaysia and insufficient research conducted on the matter, it is a raising concern that the issue of externalising and internalising behaviour problems are further looked into amongst preschool children in Malaysia. Limited studies have been conducted addressing externalising and internalising behaviour problems particularly amongst preschool children in Malaysia, thus, this study was conducted based on the alarming statistics of behaviour problems amongst children in Malaysia and with the intentions to add to the existing body of literature available.

Child temperament has been collectively implicated as providing the basis for the development of behaviour problems in children (Gartstein, Putnam, & Rothbart, 2012) as temperament in childhood appear in their early years and are generally stable across time, forming building blocks for personality development in children's later years (Rothbart & Bates, 2006). Temperament, which is biologically based but influenced by genes, environment and experience, encompasses the way situations are approached by a child (Putnam, Rothbart, & Gartstein, 2008). This can be identified as negative affectivity, or commonly addressed as negative emotionality, which predicts distress in preschool period, effortful control referring to self-regulation and surgency which is referred to interchangeably with extraversion or positive emotionality (Gartstein, Putnam, & Rothbart, 2012).

The University of Maryland Child Development Lab revealed the impact of a child's temperament, which is critical in their social and emotional development through a longitudinal study, Temperament Over Time (TOTS). The research that studied hundreds of children starting from two years of age until they were seven years old to identify factors that moderated a young child's temperament, found that temperament is buffered by many factors including parenting behaviour and care giving (Washington Parent, 2009). The findings revealed that while a child's temperament cannot be changed, parent's parenting behaviours can be adjusted based on their child's temperament in order to determine the emotional and behavioural outcome of the child with research suggesting how different child temperaments may possibly evoke different behaviours in parenting (Lerner, 1993). These descriptions clearly indicate the importance of linking child temperament in studying the possible contributors of child behaviour problems.

Maternal parental bonding, as illustrated by Troy N.W. (1995) from the University of Nebraska Medical Centre, emerges as soon as the mother has contact with her newborn, holding the infant in her arms for the first time, which carries on long into the life of the child. This relationship instantly causes approximately 77.9% of mothers to feel an immediate affection towards their infant when they begin interaction with their baby – either on childbirth day or during the days after – with only 1.6% reporting missing these feelings (Troy, 1995). As reported by Troy, this relationship makes the mother-child connection far more intimate in comparison to father-child bonding.

Similarly, studies focusing on parenting have researched on mothers (Park, Belsky, Putman & Crnic, 1997) or on families with the mother as the primary caregiver, which have highlighted that child behaviour problems are more significantly related to maternal parenting versus paternal (Rothbaum & Weisz, 1994), making the role and relationship of mother-child far more crucial and important in comparison to that of the father-child. The outcome of children

varies and depends on whether or not there is a good or poor relation between parenting and child temperament (Chess & Thomas, 1999).

The goodness-of-fit perspective between mother and child acknowledges that a child's temperament with maternal parenting behaviours, predicts behavioural outcomes (Gallagher, 2002). Maternal responsiveness to children's negative emotions, helps reduce negative expression and increases positive emotions (Denham, 1993) as this predicts children's prosocial adjustment and lowers behavioural problems (Lahey 2008). Bridgett (2009) found that high maternal rejection or negative behaviours shapes the quality of parenting, predicting less maternal affection (Pettit & Bates, 1984) when dealing with children of negative affectivity. Maternal rejection contributes to the outcome of adjustment problems predicting long term externalising and internalising behaviour problems (Lengua, 2006). According to Lengua (2006), hostility and rejection by mothers were linked to higher externalising behaviour problems while Kiff (2011) reported that negative maternal parenting behaviours predicted child anxiety. Thus, the relevance of studying parenting behaviours from a maternal perspective is crucial in identifying contributing factors to child externalising and internalising behaviour problems amongst preschool children.

Parenting can influence the relationship between temperament and child behaviour problems (Putnam, Sanson & Rothbart, 2002) as due to the differences in temperamental traits, children present various stimuli to parents causing parents who are stimulated differently to behave differently (Lerner, 1995). Lerner (1995) described that difficult children elicit negative control from their parent which causes externalising behaviour problems while difficult infants elicit less maternal warmth also predicting externalising behaviour problems.

Maternal parenting self-report positively mediated the link between children's negative affectivity and internalising behaviour problems (Paulussen-Hoogeboom, Stams, Hermanns, Peetsma, & Van den Wittenboer, 2008), emphasizing a plausible indirect pathway between temperament and behaviour problems mediated by parenting. Maternal rejection has been proven to mediate higher levels of child negative affectivity of anxiety and depression as this behaviour by mothers predicted greater psychological control over their children causing negative behavioural outcomes (Bruggen, Stams, Bogels & Hoogeboom, 2010).

The contextual influences in the environment of a child which looks at demographic backgrounds, have been proven to influence child development. To note a few influencers, research on child development have found the link between socioeconomic status of a family and emotional and behaviour development (Costello, Compton, Keeler & Angold, 2003). Previous studies have also identified children who live in households with large number of siblings are susceptible to maltreatment, maternal depressive symptoms which contribute to

child behaviour problems (Black, Papas, Hussey, Dubowitz, Kotch, & Starr, 2002). Thus, this study will look at demographic factors as antecedent variables of this study as contributors to the development of child behaviour problems.

Only a handful of studies have been conducted focusing on child behaviour problems amongst preschool children in Malaysia as most studies that have been reviewed, focused on adolescence. Additionally, the role of maternal parenting behaviour with child temperament and externalising and internalising behaviour problems have not been conducted in Malaysia, thus, this study aims to fill the gaps in literature on the relationship between the said variables. With the presented factors and with a lack of studies conducted in Malaysia, the mediating role of maternal parenting behaviour linking child temperament and child behaviour problems need to be further explored.

Based on the problem statement presented, the link between child temperament, maternal parenting behaviour and externalising and internalising behaviour problems amongst preschool children is pertinent to be examined as although a vast number of research have been conducted in Western contexts, but to our best knowledge, limited studies have analysed the relationship between these variables in Malaysia. Statistics on the issue of child behaviour problems from Malaysian organisations and experts in the field, from documented and undocumented studies stated above, provide a concrete basis for the need of this study as the issue is seen as a rising concern with development and urbanisation of lifestyles and thus the requirement for more research is substantiated.

Previous studies have researched on child temperament, maternal parenting behaviour and child behaviour problems independently or linking two or more of these variables in one study, thus, this research will look at all these variables in one framework, locally. This will ensure the results of this study will help fill gaps in existing literature while contributing to current knowledge that is available. The findings of this study will also add as useful information to improve prevention and intervention programmes that already exist for the benefit of parents and teachers. Lastly, as the preschool age is crucial in determining the development of child emotional and behavioural outcomes, only a handful of studies have been run in Malaysia focusing on this age group as most research focus on the adolescent period, therefore, this study will be able to fill gaps from this point of view.

1.3 Research Questions

Based on the research background and problem statement presented, the following research questions have been outlined for this study:

1. Are there any relationships between child's demographic variables (age and number of siblings) and mothers' demographic variables (age, years of education and income level) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor?
2. Are there any relationships between child temperament (effortful control, negative affectivity and surgency) and maternal parenting behaviour with levels of externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor?
3. What are the unique predictors of externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor?
4. Is there a mediating effect of maternal parenting behaviour between respondent's temperament (effortful control, negative affectivity and surgency) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor?

1.4 Research Objective

Based on the stated research questions, the below objectives are outlined for this study :

General Objective

To examine the relationship between child temperament and maternal parenting behaviour with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.

Specific Objective

1. To examine the relationships between child's demographic variables (age and number of siblings) and mothers' demographic variables (age, years of education and income level) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.
2. To examine the relationships between child temperament (effortful control, negative affectivity and surgency) and maternal parenting behaviour with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.
3. To examine the unique predictors of externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.
4. To examine the mediating effect of maternal parenting behaviour between respondent's temperament (effortful control, negative affectivity and surgency) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.

1.5 Hypotheses

Based on the objectives of this research that have been outlined, the following hypotheses have been formulated for this study :

Objective 1 : *To examine the relationships between child's demographic variables (age and number of siblings) and mothers' demographic variables (age, years of education and income level) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.*

Ha 1 : There is a significant relationship between child's age with externalising behaviour problems.

Ha 2 : There is a significant relationship between number of siblings with externalising behaviour problems.

Ha 3 : There is a significant relationship between mother's age with externalising behaviour problems.

Ha 4 : There is a significant relationship between the mother's years of education with externalising behaviour problems.

Ha 5 : There is a significant relationship between mother's income with externalising behaviour problems.

Ha 6 : There is a significant relationship between child's age with internalising behaviour problems.

Ha 7 : There is a significant relationship between number of siblings with internalising behaviour problems.

Ha 8 : There is a significant relationship between mother's age with internalising behaviour problems.

Ha 9 : There is a significant relationship between mother's years of education with internalising behaviour problems.

Ha 10 : There is a significant relationship between mother's income with internalising behaviour problems.

Objective 2 : *To examine the relationships between child temperament (effortful control, negative affectivity and surgency) and maternal parenting behaviour with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.*

Ha 11 : There is a significant relationship between effortful control and externalising behaviour problems.

Ha 12 : There is a significant relationship between negative affectivity and externalising behaviour problems.

Ha 13 : There is a significant relationship between surgency and externalising behaviour.

Ha 14 : There is a significant relationship between maternal parenting behaviour and externalising behaviour problems.

Ha 15 : There is a significant relationship between effortful control and internalising behaviour problems.

Ha 16 : There is a significant relationship between negative affectivity and internalising behaviour problems.

Ha 17 : There is a significant relationship between surgency and internalising behaviour problems.

Ha 18 : There is a significant relationship between maternal parenting behaviour and internalising behaviour problems.

Objective 3 : *To examine the unique predictors of externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.*

Ha 19 : Child and maternal demographic variables, child temperament and maternal parenting behaviour does not equal zero when regressed against externalising behaviour problems.

Ha 20 : Child and maternal demographic variables, child temperament and maternal parenting behaviour does not equal zero when regressed against internalising behaviour problems.

Objective 4 : *To examine the mediating effect of maternal parenting behaviour between respondent's temperament (effortful control, negative affectivity and surgency) with externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.*

Ha 21 : There is a significant mediating effect of maternal parenting behaviour in the relationship between effortful control and externalising behaviour.

Ha 22 : There is a significant mediating effect of maternal parenting behaviour in the relationship between negative affectivity and externalising behaviour.

Ha 23 : There is a significant mediating effect of maternal parenting behaviour in the relationship between surgency and externalising behaviour.

Ha 24 : There is a significant mediating effect of maternal parenting behaviour in the relationship between effortful control and internalising behaviour.

Ha 25 : There is a significant mediating effect of maternal parenting behaviour in the relationship between negative affectivity and internalising behaviour.

Ha 26 : There is a significant mediating effect of maternal parenting behaviour in the relationship between surgency and internalising behaviour.

1.6 Definition of Terms

Child Temperament

Conceptual definition: According to Mary K. Rothbart (1981), temperament is defined as the constitutionally based individual differences in reactivity and self-regulation (Rothbart & Derryberry, 1981) from which three broad constructs of have been extracted; i) *surgency* – also referred to as extraversion, traits of positive affect traits of activity level, high-intensity pleasure, impulsivity, shyness ii) *negative affectivity* – also referred to as negative emotionality, traits of anger,

discomfort, fear, sadness, soothability and iii) *effortful control* - control/constraint traits of attention focusing, inhibitory control, low-intensity pleasure, perceptual sensitivity (Rothbart & Derryberry, 1981).

Operational definition: Child temperament refers to the respondent's score on The Rothbart Child Behaviour Questionnaire (CBQ) was created to identify the temperament of children between ages 3 – 7 years old. Higher scores show a higher prevalence of a particular trait in the respondent.

Maternal Parenting Behaviour

Conceptual definition: According to Ronald P. Rohner (2008), parenting behaviour is the interpretation of the perception of parental *acceptance* or *rejection*, which form the warmth dimension of parenting, i.e. the quality of the affectional bond between parents and their children, and with the physical and verbal behaviours parents use to express these feelings (Rohner & Khaleque, 2008).

Operational definition: Maternal Parenting Behaviour refers to the respondent's score on The Parental Acceptance-Rejection Questionnaire (PARQ) was designed to measure the individual's perception of parenting from the perspective of acceptance-rejection. High scores indicate higher self-reported parenting rejection.

Child Behaviour Problems

Conceptual definition: According to T. M. Achenbach (2004), child behaviour problems are adaptive and maladaptive dysfunctional behaviours of children, which are broken down into *externalising* behaviour of aggression and attention problems and the *internalising* behaviour problems of somatic complaints, withdrawal, depression/anxiety and emotionally reactive (Achenbach & Rescorla, 2004).

Operational definition: The Achenbach Caregiver Teacher Report Form (CTRF) was formulated to assess adaptive and maladaptive functioning of respondents aged 1½ - 5 years old in categories of normal, borderline or clinical. Higher scores of behaviour problems signify a higher prevalence of child behaviour problems.

1.7 Theoretical Framework

The basis of this study was formed using the fundamentals of the Bioecological Systems Theory (Bronfenbrenner & Morris, 2006) by Urie Bronfenbrenner, which

is a redefined theory from the original, widely-used Ecological Systems Theory (Bronfenbrenner, 1979). In the former theory, Bronfenbrenner defined human development by giving prominence to its environment where a child's surroundings are interrelated and nestled in five systems, i.e. the microsystem, mesosystem, exosystem, macrosystem and chronosystem.

However, this has now been altered, redefined and extended to focus more on a person-context interrelatedness (Tudge, Gray, & Hogan, 1997). The child's own biology is now the focus with the main microenvironment that fuels its development, and stresses quality, context and interrelatedness, or known as the 'proximal processes' of the environment, which stimulates a child's physical and cognitive development, thus forming the essence of the Process-Person-Context-Time theory as Figure 1.1.

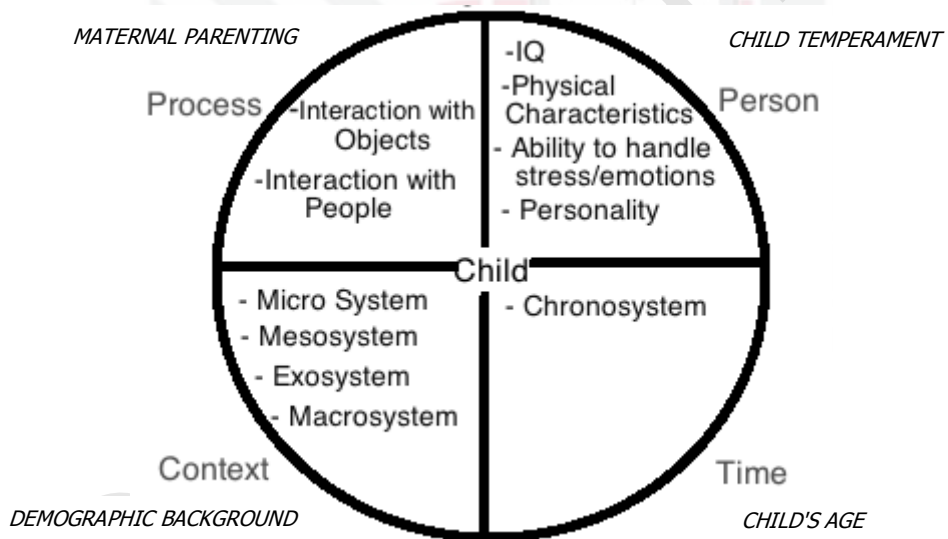


Figure 1.1 : Process – Person – Context – Time

Greater emphasis was placed by Bronfenbrenner on proximal processes which he called "the engines of development" (Bronfenbrenner & Evans, 2000) which "must occur on a fairly regular basis over extended periods of time" (Bronfenbrenner, 1995). In a developing child, an example of proximal processes can be defined by parent-child interactions. According to Bronfenbrenner and Ceci (1994), mechanisms through which developmental potentials are actualised are called proximal processes which are far more powerful in influencing development than contextual factors.

The theorists stressed that although proximal processes greatly influence development, a person's own beliefs are far greater to reduce or enhance the effects of these processes in influencing behaviour and development (Bronfenbrenner, 1995). This idea, which emphasised the bioecological aspect of the theory, is integrated into his force-resource model of the person's own biopsychological characteristics, i.e. one's own perceptions, beliefs, and level of motivation and one's own resources, skills, and abilities.

Applying the fundamentals of the Bioecological Systems Theory and based on the conceptual framework of this research, this study will look at proximal processes from the aspect of child temperament as the person factor and maternal parenting behaviour as the process element; both of which are seen as the most crucial contributors to the development of a child. In applying the contextual factors, this research will be analysing the antecedent variables of demographic factors while the time element will be seen as the growing years of the child in perspective.

Process – Person; Proximal Processes

Numerous studies that link the effects of child temperament and parenting behaviours on the outcome of a child's development have utilised the bioecological theory as the basis for identifying parenting as a socialisation process and temperament as a biological predisposition in predicting child emotional and behavioural development (Gallagher, 2002). According to Gallagher (2002), the Bioecological Systems Theory proposes ways in which specific qualities of parenting determines the effects of a child's development as it interacts with distinct child temperament characteristics over time.

Temperament and parenting are not only an interaction of the organism-environment but a reciprocal process in which the child is an active participant in parenting as they elicit parenting behaviour and respond in ways that shape parenting forming a synergism of process (parenting) and person (temperament). This is in line with the bioecological theory (Bronfenbrenner & Morris, 2006), and thus, it can be concluded that proximal processes and person characteristics synergistically predict the developmental outcomes of a child.

Process

Bronfenbrenner (1995) describes a study by professor Drillien of the University of Edinburgh, where the research assessed factors affecting the development of children who had low birth weight. In this study, it was found that the proximal process of mother-infant interaction across time was an especially powerful predictor in determining the outcome of the child's development, as good

maternal treatment was seen to reduce a certain amount of behavioural disturbances by the child. Similarly, the process element in this current study, which is the systematic interaction between the person and the environment, will look at maternal parenting behaviour and its effects on the development of child behaviour problems amongst preschool children.

Under great levels of mother-child interaction, proximal processes have the ability to reduce or buffer against differences in the environment for the development outcome in a child. Apart from the early works that suggested how proximal processes between the mother and child foster strong emotional attachment while increasing the quality of future interaction between the two (Ainsworth, Blehar, Waters, & Wall, 1978), recent works of a similar nature have indicated that with the ongoing close relationship between the mother and child, the child begins to develop a self that mirrors the content and form that is conveyed through the interaction and interrelatedness of the mother-child relationship (Sroufe, 1990). Therefore, the relationship between maternal parenting behaviour, as a process, with the development of child externalising and internalising behaviour problems was analysed in this research.

Person

Bronfenbrenner acknowledged the great role of the biological and genetic factors of a person (Bronfenbrenner & Ceci, 1994) with an emphasis on three personal characteristics that one brings with them, i.e. demand, which is a personal stimulus that acts as an immediate stimulus to another person, such as age, gender, skin colour and physical appearance; resources, which are characteristics related to mental and emotional resources like past experiences, skills, intelligence and social and material factors like food, housing and education; and forces, which are related to the temperament, motivation and persistence of a person. In the context of the person element of the theory, which is personal characteristics of the individual in social interactions, this study will look at child temperament as identifying the person in relation to the process-person-context-time cycle in determining child behaviour problems.

From a child's contributing perspective, child's temperament has received most focus as a contributor in influencing parenting, particularly behaviours that are generally classified in the difficult domain (Bates J. , 1980). The child's influence on parenting, whether more or less difficult to care for, which indeed does shape the quality of parental care received, is widely recognised by developmentalists with one research reporting that mothers who rated their children with difficult temperaments interacted with them less and were less responsive to their cries (Campbell S. B., 1979). Thus, the various child temperaments of negative affectivity, surgency and effortful control, as the person, will be analysed to see

its relationship in determining the outcome of child externalising and internalising behaviour problems in this study.

Context – Time; Contextual Influences

In assessing contextual factors to child development, the bioecological theory clearly emphasises the interrelated play of personal and environmental factors. This is defined by the multi-system layers of the environment which influence child development. By this, apart from looking in depth at the micro level of a child i.e. the individual and his immediate interactions, contextual factors considers an individual's biology in addition to external influences that drive development. This summarises that an individual's development cannot be generalised but are multi-system in its individual setting, taking into account in addition to a biological element, the context of developmental processes that it is occurring in, plus the time in which it is happening.

In the person-process-context-time theory, context refers to ones environment from complex levels of micro to macro systems. Proximal processes occur in the immediate microsystems with face-to-face, frequent interactions (Bronfenbrenner, 1995). However, the microsystem is also made up of larger, influential elements i.e. socio-economic levels, culture and community. Context is fuelled and mediated by "form, power, content and direct" of proximal processes which contribute to child development. Proximal processes which occur in stable and advantageous environments tend to positively influence the development of genetic potential (Bronfenbrenner, 1995), while if in unstable environments, development could be less effective.

The dimension of time in the theory examines incidents that occur in cross-generational human relationships such as interrelatedness between parents and children. Time element refers to the periodicity of person-process relationship i.e. continuity, discontinuity, stability and instability of ongoing proximal processes. The age factor of a child is taken into consideration in the element of time. In longitudinal situations, macrotime can be influenced by historical events or societal changes. Therefore, in examining contextual elements of this theory in relation to this research, context will look at demographic variables of child and mother i.e. number of siblings in a home setting, socioeconomic status and educational background while time will assess the age of the child in perspective.

Context

From the perspective of the context of the bioecological theory, looking at the contextual sources of stress and support from an ecological perspective, i.e.

work, marital relationships and social networks, these influence the parent-child relationships and psychological well-being positively and the mental health of parents in particular relates to the overall positive parental functioning (Belsky, 1984). From the element of the context of the bioecological theory, the current research will study elements of the child's and mother's demographic background profiles and their possible contribution in determining the child emotional and behavioural outcomes.

Family environmental factors could moderate between child temperament with externalising and internalising behaviour problems (Bates, Pettit, Dodge, & Ridge, 1998), while family and marital conflict and exposure to violence could contribute to the early manifestations of both anxiety and depression. This is because these experiences represent stressful life events that are linked to a negative emotional climate (Marakovitz, Wagmiller, Mian, Briggs-Gowan, & Carter, 2011). Socioeconomic status, on the other hand, has been known to be one of the most popular environmental risk factors contributing to mental health, as people with high income, occupational status and education are often happier and less likely to be exposed to the possibility of depression or any other psychiatric disorders in comparison to those with low socioeconomic status (Clark, Frijter, & Sheilds, 2008; Lorant, Deliege, Eaton, Robert, Philipot, & Anseau, 2003). As such, this study will look at the relationship of the child's and mother's demographic background profiles – number of siblings, mother's age, level of income and years of education, as the context, in determining the development of externalising and internalising behaviour problems.

Time

The element of time in this theory is defined by Bronfenbrenner & Morris (1998) as micro-time, which occurs during the course of some specific activity or interaction; meso-time, which is the extent to which activities and interactions occur with some consistency in the developing person's environment); and macro-time, which refers to the fact that developmental processes are likely to vary according to the specific historical events that are occurring as the developing individuals are at one age or another. In relation to the element of time in the said theory, this study will look at the effects of time of the age of the child from a retrospective order in relation to its contribution to the development of externalising and internalising behaviour problems on children.

Based on the theory, time and timing are equally important parts that is, relative constancy and change, whether it is related to one developing individual themselves, the activities and interaction that they engage in or the various microsystems in which they are placed. Therefore, the early developmental year of the child until the child's current preschool years which determines the age of the child, will be looked at as the time, as this is the period in which the

possible development of child externalising and internalising behaviour problems take place.

In adopting the bioecological theory, a study by Riggins-Caspers (2003) studied the gene-environment interrelatedness through retrospective reports of parental discipline. They identified this as the environmental independent variable of the study while birth parent's psychopathology served as the biological predictor, and adolescent aggressiveness and conduct disorders were identified as the dependent variable in the study. The study assessed proximal processes through the adoptive parent's harsh discipline, which was influenced by the parent and child characteristics, and the environment, thereby indicating that the child's problem behaviour is influenced by both their own childhood predisposition and by the parent's psychopathology. The research team concluded that time constitutes a limitation of their study in-line with the bioecological theory, as this aspect relied on a retrospective approach.

Based on a similar approach, this study applies the fundamentals of Bronfenbrenner's Bioecological Systems Theory, identifying child's temperament from a biological aspect as the 'person' in the context of the study, maternal parenting behaviour as the important 'process', both of which form the crucial 'proximal processes' in relation to the developmental outcome of a child while the demographic variables of mother and child, form the basis of the 'context'. Similar to the study by Riggins-Caspers (2003), this study looks at 'time' as the child's age which is from a retrospective approach in which the current outcome of child development is reported by teachers based on biological temperament and mother-child interactions from a retrospective outlook. With the aspects of the Bioecological Systems Theory adapted as a supporting theory of this study, it is the objective of this study to better understand the various child temperament and maternal parenting behaviours that work within the circumstances across time in determining the emotional and behavioural development of the child.

1.8 Conceptual Framework

With the above-mentioned descriptions pertaining to the issue of child behaviour problems being influenced by the natural biological and environmental factors, the following conceptual framework, as illustrated in Figure 1.2, is identified for this research study concerning the relationships among child temperament, maternal parenting behaviour and child externalising and internalising behaviour problems. It is deemed necessary that this growing issue is understood and addressed here in Malaysia.

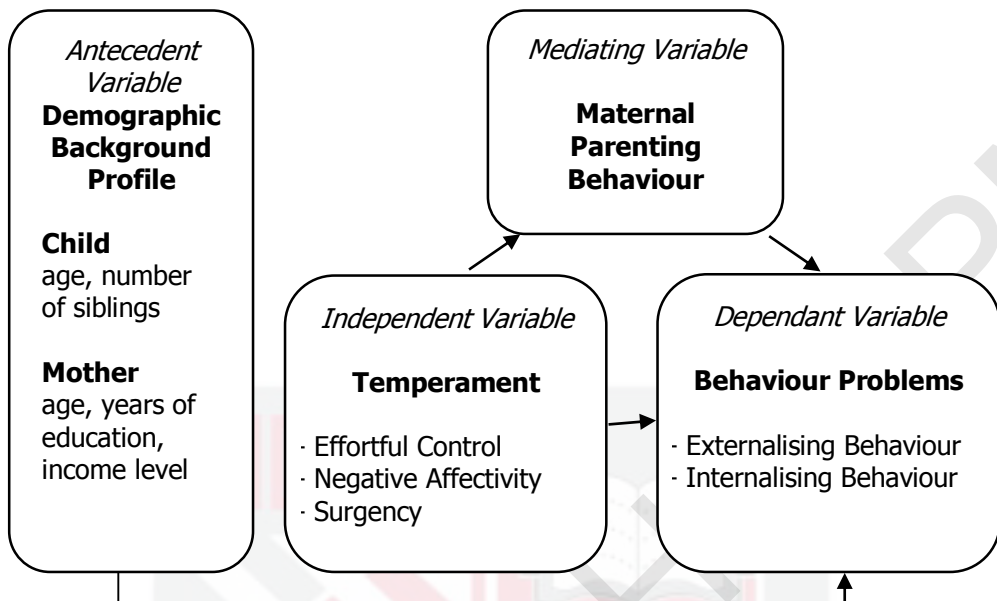


Figure 1.2 : Conceptual Framework of Research Study

Child temperament has been identified as the nature of a child that predicts the child's reactions to various situations that can affect the development of emotional and behavioural problems in the child. This, being buffered by the way a mother behaves towards her child, can further predict the outcome of child behaviour problems. Thus, this forms the conceptual framework of this study with child temperament being the independent variable of the study causing externalising and internalising behaviour problems, which are the dependant variables of the study. Maternal parenting behaviour has been identified as the mediating variable of the study, which corresponds with child temperament to possibly predict child behaviour problems. The demographic background profiles of mother and child have been identified as the antecedent variables in this study, which also possibly contribute to the outcome of externalising and internalising behaviour problems.

1.9 Significance of Research

This study is significant and adds to the existing knowledge in literature concerning the influence of child temperament, maternal parenting behaviour and demographic profiles on externalising and internalising behaviours in preschool children in a Malaysian context. Researchers and experts in the field of developmental psychology can replicate a similar framework to carry out a more detailed and in depth study in a larger geographical context to further understand the scenario of child behaviour problems amongst preschoolers in

Malaysia, using this study as a basis of reference. Knowledge gained from the study can be implemented to improve prevention and intervention programs in addressing mental health issues amongst young children. Results of the study can also support and provide basis for theoretical expansion when considering issues of externalising and internalising behaviour problems amongst preschool children.

The results of this research will also benefit parents and teachers in creating awareness of the possibility of their children and students being identified as having externalising and internalising behaviour problems, without overlooking the symptoms as a phase that children will outgrow. It is hoped that this research would be able to reveal the possibility of child emotional and behavioural problems being evident in any child of various settings and that all evidence should be explored further. Parents and teachers should be more conscious of the possibility of various issues contributing to child behaviour problems and take the necessary actions to overcome such problems, seeking expert help in order to safeguard the future of young children at risk. From this study, it can also be concluded that mothers should also be more aware of their parenting behaviour and take the necessary steps to be able to deal appropriately with their children to suit their biological make-up while ensuring amicable mother-child relationships, which are crucial.

The outcome of this study will also provide beneficial knowledge to Malaysia's Ministry of Health, Ministry of Education, Department of Social Welfare, Mental Health Association and the like, concerning the issue of externalising and internalising behaviour problems amongst preschool children in a local setting and the possible contributing factors. The results of this study, which statistically reveal the issue of behaviour problems amongst Malaysian preschool children, can be presented to relevant stakeholders and policymakers to alleviate future problems and facilitate the further development of this issue with the implementation of relevant programmes and intervention measures in schools.

1.10 Limitations of Research

Throughout the process of this study, several factors were noted as key factors contributing to the limitations in carrying out this research. These factors have been noted below as points of concern for the consideration of future studies carried out in similar settings.

Basing this study on a Malaysian scenario, there are a lack of local studies on related topics to reference. For most of the variables, it is possible to obtain Western referencing individually but not all variables in one framework. However, from a Malaysian perspective, there are lack of studies carried out that

can be used either as individual variables for referencing nor all together as one framework.

Notwithstanding the fact father's play an important role in shaping the lives of a child, especially in an urban setting, it is the intention of this study to focus solely on the involvement of the maternal figure in the development of the child's emotion and behaviours because, as presented earlier, the mother is noted to generally form a special bond with her child from the very early stages in comparison with the father.

The cooperation and interest in participating in this research study by the mothers and teachers was a challenge at the data collection stage. Perhaps due to cultural behaviours, some mothers did not provide feedback or complete questionnaires resulting in approximately 30 less potential respondents. Continuous follow-ups were also required for the collection of the distributed questionnaires from all. However, the final valid number of questionnaires obtained fulfilled the requirements of this research.

Working with preschool children as the main respondent was challenging as young children are not able to respond to questionnaires, which requires the need to liaise with parents and teachers to respond for the child. This is an additional step in the data collection process which is time consuming in comparison to obtaining questionnaires from older children or adolescence who can answer for themselves.

Finally, the time element from the Bioecological Systems Theory which supports this study is applicable in testing the age of the child in context. However, for best results, time would best be tested in a longitudinal perspective.

1.11 Chapter Summary

The above chapter has provided an overview concerning the scenario of externalising and internalising behaviour problems amongst preschool children from a global and local perspective. The introduction and problem statement has indicated many results and statistics on the alarming rise of this issue amongst children abroad as well as here in Malaysia. Also outlined were pertinent contributing factors to this developmental problem identifying child temperament and maternal parenting behaviours as crucial contributors to the healthy emotional and behavioural development of a child. The research questions, research objectives, hypotheses, significance and gaps of this research have been outlined while supporting the conceptual and theoretical framework of the study that have been formed. Thus, these important factors

have shaped the basis of this study on externalising and internalising behaviour problems amongst preschool children in Serdang, Selangor.



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